

[0253] For this reason, unless adjustments are made, a storage battery having a higher degree of degradation reaches a full charge ahead of a storage battery having a lower degree of degradation. Also, the storage battery having the higher degree of degradation is charged with the charge voltage thereof higher than that of the storage battery having the lower degree of degradation. The storage battery having the higher degree of degradation further degrades due to this charge voltage.

[0254] On the other hand, the charge of the storage battery having the lower degree of degradation is ended with the charge voltage thereof being low. Accordingly, the storage battery having the lower degree of degradation is less likely to degrade. For this reason, unless adjustments are made, the difference in the degree of degradation between the storage battery having the higher degree of degradation and the storage battery having the lower degree of degradation tends to expand. The same holds for a discharge. Unless adjustments are made, the difference in the degree of degradation between the storage battery having the higher degree of degradation and the storage battery having the lower degree of degradation tends to expand.

[0255] In the present embodiment, the storage battery having the higher degree of degradation is controlled so that the charge voltage thereof is reduced. Also, the storage battery having the higher degree of degradation is controlled so that the discharge voltage thereof is increased. Also, an increase in the number of charge/discharge cycles is suppressed with respect to the storage battery having the higher degree of degradation. Thus, the degradation of the storage battery having the higher degree of degradation is suppressed.

[0256] FIG. 23 is a diagram showing the relationships among the charge state, temperature, and degradation coefficient of the storage battery shown in FIG. 10. The charge state shown in FIG. 23 is called state of charge (SOC) and shows the ratio of the remaining capacity to the full charge capacity. The temperature shown in FIG. 23 corresponds to the temperature of the storage battery. The degradation coefficient in FIG. 23 corresponds to the speed of degradation. Specifically, when the storage battery has a greater degradation coefficient, the storage battery degrades more easily and faster.

[0257] As shown in FIG. 23, when the charge state of the storage battery is higher, the storage battery degrades more easily. Also, when the temperature of the storage battery is higher, the storage battery degrades more easily. For example, the power storage device 200 of the present embodiment reduces the charge state using the adjusters 261, 262, and 263 before the temperature of the storage battery becomes a predetermined temperature or more and thus can suppress degradation.

[0258] As described above the power storage device 200 of the present embodiment can appropriately control the charge/discharge of the storage battery modules 211, 212, and 213 by using the adjusters 261, 262, and 263. Thus, the power storage device 200 can extend the life of the entire storage battery modules 211, 212, and 213.

[0259] The amounts of the currents flowing through the adjusters 261, 262, and 263 correspond to the degrees of degradation. Accordingly, the power storage device 200 may issue a notification to urge the exchange among the storage battery modules 211, 212, and 213 in accordance with the amounts of the currents flowing through the adjusters 261,

262, and 263. The notification may be transmitted, or may be outputted to the screen or the like of the power storage device 200.

[0260] For example, it is conceivable that if the difference between the amount of the current flowing through the adjuster 261 and the amount of the current flowing through the adjuster 262 is equal to or greater than a predetermined value, there is a great difference between the degrees of degradation of the storage battery module 211 and storage battery module 212. In this case, the power storage device 200 may issue a notification to urge the exchange between the storage battery module 211 and the storage battery module 212.

[0261] Owing to the exchange between the storage battery module 211 and storage battery module 212, the degrees of the degradation based on the layout are equalized. This results in the suppression of the local degradation of the storage battery modules 211, 212, and 213 and thus the extension of the life of the entire storage battery modules 211, 212, and 213.

[0262] In a configuration in which a greater amount of adjustment current flows when the degree of degradation is lower, as shown in FIG. 7, the power storage device 200 may check the degrees of degradation periodically and change the amounts of adjustment currents in accordance with the difference with the maximum degree of degradation. For example, when the storage battery module 212 is a most highly degraded storage battery module, the power storage device 200 may change the amount of the adjustment current flowing through the adjuster 261 in accordance with the difference in the degree of degradation between the storage battery module 212 and storage battery module 211.

[0263] In discarding the storage battery modules 211, 212, and 213, the power storage device 200 may perform a discharge using the second circuits passing through the adjusters 261, 262, and 263 until all the storage battery modules 211, 212, and 213 reach an empty capacity. At this time, the discharged power may be consumed by the adjusters 261, 262, and 263. Thus, the storage battery modules 211, 212, and 213 can be discarded appropriately.

[0264] Similarly, in discarding the storage battery module 211, the power storage device 200 may perform a discharge using the second circuits passing through the adjusters 611 to 617 until all the storage battery blocks 411 to 417 reach an empty capacity. Thus, the storage battery module 211 can be discarded appropriately.

[0265] When the charge state is higher than a predetermined value and the temperature is higher than a predetermined value, the power storage device 200 may discharge the storage battery modules 211, 212, and 213 using the second circuits passing through the adjusters 261, 262, and 263. At this time, the discharged power may be consumed by the adjusters 261, 262, and 263. Thus, the charge state is reduced, and the degradation is suppressed.

[0266] The power storage device 200 may automatically detect a high charge state and a high temperature using the detectors 231, 232, and 233 and then perform a discharge, or may perform a discharge in accordance with an instruction from outside. This operation can also be applied to the storage battery blocks 411 to 417 using the adjusters 611 to 617.

[0267] As described above, multiple storage battery units are appropriately controlled by the power storage system and the like of the present disclosure.